

CLASS TITLE: EXPERIMENTAL MACHINIST SUPERVISOR

Class Code: 02337400

Pay Grade: 23A

EO: G

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: In an experimental machine shop, to be responsible for the supervision and work of a staff engaged in performing highly skilled diversified machining operations involving the construction and repair of mechanical devices for experimental work; and to do related work as required.

SUPERVISION RECEIVED: Works under the general supervision of a superior with considerable latitude for the use of independent judgement in the application of practices and techniques of the trade; work is subject to review for conformance to established policies, practices and satisfactory performance.

SUPERVISION EXERCISED: Plans, assigns, supervises and reviews the work of experimental machinists, mechanical draftspersons and other personnel, makes specific assignments and gives technical advice and assistance when necessary.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To be responsible for the supervision and work of a staff engaged in performing highly skilled diversified machining operations with steel, brass, sheet metal, wood, plastics and other materials used in the construction and repair of experimental machinery and equipment.

To analyze written specifications, drawings, rough sketches and verbal descriptions to plan layout and determine the sequence of operations.

To analyze and interpret complex blueprints.

To assign specific machining jobs to experimental machinists or other personnel, and to supervise the machining of different materials, both ferrous and non-ferrous metals, plastics, wood, and other materials.

To be responsible for making cost estimates of labor and materials.

To supervise the use of all machines, machine tools, hand tools and precision measuring instruments, and to instruct shop personnel in their proper use.

To supervise the installation of electrical circuits relating to mechanical components required for the completion of a project.

To supervise the welding, soldering and brazing of metals, non-ferrous metals and plastic materials.

To give detailed instructions and explanations of work to be performed, developing work routing and scheduling plans.

To check finished product for accuracy, workability and appearance.

To maintain time and other records and to make reports.

To supervise skilled personnel.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A thorough knowledge of the methods, practices and tools used in the toolmaking trade, such as lathes, shapers, planers, cylindrical and surface grinders, vertical and horizontal milling machines, radial and standard drill presses, metal cutting band saws, jig borers and other related tools and machinery; a thorough knowledge of shop mathematics, metal properties and layout machinery procedures; the ability to study specifications such as a blueprint, sketch or rough drawing of parts to be repaired or manufactured; the ability to understand oral outlined descriptions of parts or equipment to be manufactured; the ability to measure, mark and scribe dimensions

and reference points to lay out stock for machining; the ability to solve experimental problems relative to work-holding arrangements, materials, machine settings, tools, product specifications and fabrication; the ability to set-up and operate machine tools and to provide instruction in their use; the ability to fit and assemble parts to make or repair mechanisms, tools, or machines; the ability to supervise the installation of electrical circuits; the ability to supervise the welding of various metals and plastics; the ability to supervise experimental machinists and other personnel engaged in the operation of machine tools, and to plan and lay out complex work assignments; the ability to write clear, concise and accurate reports; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: completion of twelve school grades and a certified apprentice program in the machining or toolmaking trade; and

Experience: Such as may have been gained through: employment as a skilled machinist, experimental machinist or toolmaker.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class Created: May 2, 1982

Editorial Review: 3/15/03